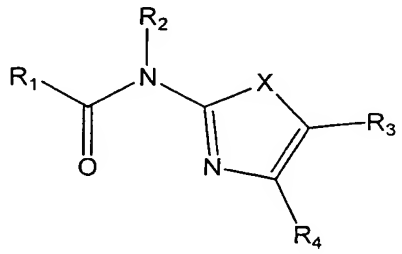
CLAIMS

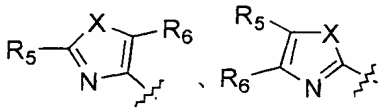
What is claimed is:

1. A methionine aminopeptidase inhibitor represented by the general formular



wherein

R_1 is selected from the group consisting of C_1-C_4 alkyl, substituted alkyl, C_3-C_6 cycloalkyl, substituted cycloalkyl, aryl, pyridyl; substituted aryl and substituted pyridyl wherein the substituents can be optionally selected from the group consisting of C_1-C_4 alkyl, nitro, carboxyl, aldehyde, alkoxy, alkylamino, acylamide, alkylthio; heterocycle or substituted heterocycle having the following structure:



R_5, R_6 are selected from the group consisting of hydrogen, C_1-C_4 alkyl, substituted alkyl, C_3-C_6 cycloalkyl, substituted cycloalkyl, aryl, pyridyl; substituted aryl and substituted pyridyl wherein the substituents can be optionally selected from the group consisting of nitro, carboxyl, aldehyde, alkoxy, alkylamino, acylamide, alkylthio;

R_2 is selected from the group consisting of hydrogen, C_1-C_4 alkyl, substituted alkyl, aryl, substituted aryl wherein the substituents can be optionally selected from the group consisting of C_1-C_4 alkyl, nitro, carboxyl, aldehyde, alkoxy, alkylamino, acylamide, alkylthio;

R_3 is selected from the group consisting of hydrogen, C_1-C_4 alkyl, substituted C_1-C_4 alkyl, halogen atoms; aryl, substituted aryl;

R_4 is selected from the group consisting of hydrogen, C_1-C_4 alkyl, substituted alkyl, substituted aryl;

X is selected from the group consisting of O、S、N.

2. A methionine aminopeptidase inhibitor according to claim 1 in which R_1 is selected from the group consisting of pyridyl, substituted pyridyl wherein the substituents can be optionally selected from the group consisting of halogen atoms, acylamide, alkoxy, hydroxyl, carboxyl, alkoxycarbonyl, ether;

R_2 is hydrogen;

R_3 is selected from the group consisting of hydrogen, Br, alkyl;

R_4 is selected from the group consisting of hydrogen, alkyl, substituted aryl;

3. A methionine aminopeptidase inhibitor according to claim 1 in which R_1 is selected from the group consisting of aryl, substituted aryl wherein the substituents can be optionally selected from the group consisting of nitro, alkylamino, C_1-C_4 alkoxy, hydroxyl, carboxyl, benzyl;

R_2 is hydrogen;

R_3 is selected from the group consisting of hydrogen, halogen atoms, C_1-C_4 alkyl;

R_4 is selected from the group consisting of hydrogen, C_1-C_4 alkyl, substituted aryl;

4. A methionine aminopeptidase inhibitor according to claim 1 in which R_1 is selected from the group consisting of heterocycle, substituted heterocycle;

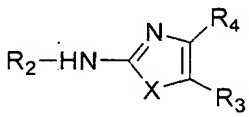
R_2 is hydrogen;

R_3 is hydrogen;

R_4 is hydrogen;

R_5, R_6 are selected from the group consisting of hydrogen, C_1-C_4 alkyl, substituted alkyl, C_3-C_6 cycloalkyl, substituted cycloalkyl, aryl, pyridyl; substituted aryl and substituted pyridyl wherein the substituents can be optionally selected from the group consisting of nitro, carboxyl, aldehyde, alkoxy, alkylamino, acylamide, alkylthio;

5. A process for the preparation of a methionine aminopeptidase inhibitor as defined in claim 1 which comprises condensating of a compound of the general formula R1COY with a compound of the general formula



in which Y represents hydroxyl, halogen atoms and the other activated group;

6. A process for the preparation of a methionine aminopeptidase inhibitor as defined in claim 4 wherein the dehydration reagents used in this reaction may be DCC、ECD、

DIC、HBTU;

7. A process for the preparation of a methionine aminopeptidase inhibitor as defined in claim 4 wherein the solvent used in this condensation reaction may be CH_2Cl_2, DMF, CH_2ClCH_2Cl, toluene, benzene, H_2O, dioxane or the mixture of the above solvents;

8. A process for the preparation of a methionine aminopeptidase inhibitor as defined in claim 4 wherein the reaction temperature is from -20°C to room temperature, in some cases, the heating is necessary, from 50° C to 130°C;

9. A process for the preparation of a methionine aminopeptidase inhibitor as defined in claim 4 wherein the proper activated reagents of the condensation reaction were used, such as, HOBT、pentafluorophenol, molecular series;

10. A process for the preparation of a methionine aminopeptidase inhibitor as defined in claim 4 wherein the proper base of the condensation reaction such as Et_3N, I-Pr_2EtN, Pyridine, DMAP were used as catalyst;

11. A methionine aminopeptidase inhibitor as claimed in claim 1, wherein these compounds were used as antitumor, and anti-infection lead compounds.